# SOLO taxonomy: Creating an app or game (7-8)
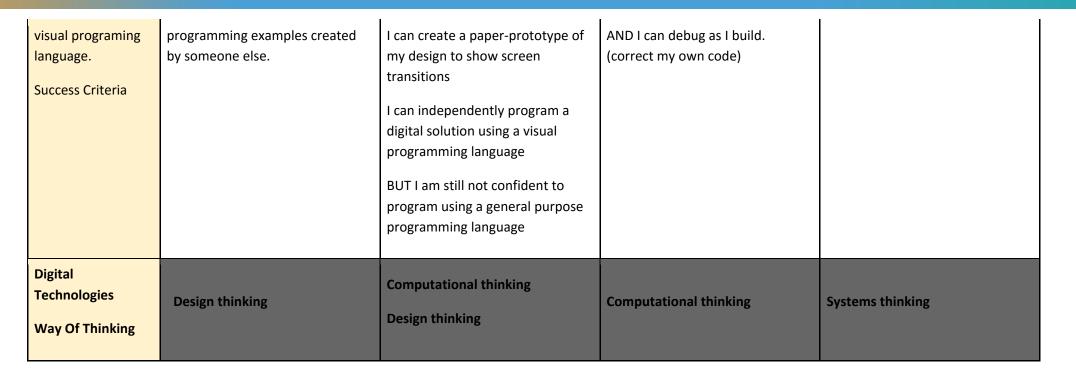
**DIGITAL TECHNOLOGIES HUB**

| We are creating an online game or mobile app | | | | |
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| **SOLO LEVEL** | One | Many | Relate | Extend |
| **SOLO VERB** | *Identify Isolated Skills* | *Describe, and Combine Serial Skills* | *Integrate Skills* | *Evaluate Skills* |
| **DECLARATIVE knowledge** (knowing about – talking or writing about the programming code) Create a digital game or app. Success Criteria | I can **DEFINE** a problem and identify functional requirements such as usability, technical or social constraints/ considerations and data requirements<br><br>I can **IDENTIFY** key elements by decomposing the problem. | I can **DESCRIBE** two or three different design ideas and in detail discuss:<br><br>☐ the logic behind transitioning between screens<br><br>☐ functional requirements to judge what idea best meets these requirements. | …AND I can **EXPLAIN** my programming choices –<br><br>☐ that involve branching (where decisions by the user are enabled),<br><br>☐ iteration (where loops and repeat functions have reduced the script length and detail)<br><br>☐ other functions for example the use of variables. | AND I can **EVALUATE** the effectiveness of mine and other's digital solutions in meeting its functional requirements by explaining:<br><br>☐ how well it meets its intended purpose<br><br>☐ how the solution met one functional requirement and one constraint. |
| **FUNCTIONING knowledge** (knowing how to) Create a digital solution using | I can interpret an algorithm presented as a flow chart and follow the steps<br>I can use a visual programming language or a general purpose programming language **IF** I copy | I can use functional requirements to create an algorithm that I use to plan out a program for a digital solution. | I can independently and confidently create a digital solution using a general programming language | AND I can seek feedback from a small group by demonstrating my solution and then act on feedback |

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| visual programing language. Success Criteria | programming examples created by someone else. | I can create a paper-prototype of my design to show screen transitions<br><br>I can independently program a digital solution using a visual programming language<br><br>BUT I am still not confident to program using a general purpose programming language | AND I can debug as I build. (correct my own code) | |
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| **Digital Technologies**<br><br>**Way Of Thinking** | **Design thinking** | **Computational thinking**<br><br>**Design thinking** | **Computational thinking** | **Systems thinking** |

As learning progresses, it becomes more complex. SOLO stands for the Structure of the Observed Learning Outcome.  It is a means of classifying learning outcomes in terms of their complexity. It can help differentiate a task to enable students to operate at their level and provide learning tasks that are progressively more challenging.

**For more about SOLO Taxonomy refer to these websites**

**John Biggs Solo Taxonomy**

**HookED: Solo Taxonomy**